Books, Book Reviews, Extracts

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Author:	Sheep CRC, Lu Hogan
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Sheep CRC Update seminars held in eight locations across Australia between February and May 2010 provided a valuable summary of progress achieved by the Sheep CRC and our Participants in our first three years of operation. The Sheep CRC publication '2010 Sheep Focus' captures key messages and results presented in the seminars in a form that provides an easy reference document. It should be cited as:

Sheep CRC/Lu Hogan – *2010 Sheep Focus -Flystrike management*

FLYSTRIKE MANAGEMENT

Beating the blowfly

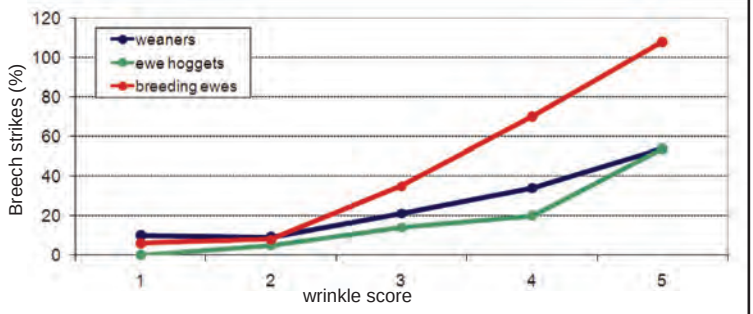
Photo: Sheep CRC

Lu Hogan, Project Leader, Flystrike & Industry Training

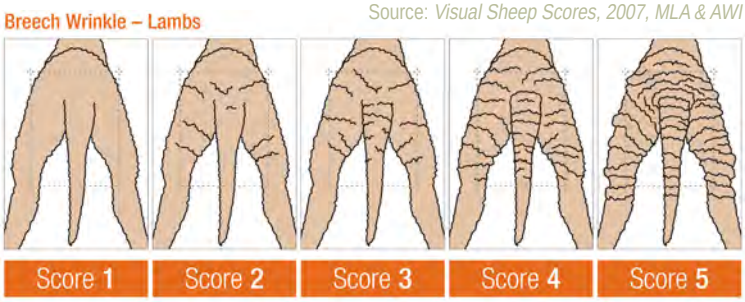
Flystrike costs the sheep industry $280 million dollars annually in lost production and treatments, and with the wool supply chain seeking wool from non-mulesed sheep, it is timely to review breeding and management approaches to flystrike prevention.

The Sheep CRC has developed an integrated and planned approach to flystrike management that can be found on the FlyBoss website: www.flyboss.org.au. This approach can reduce the risk of flystrike and increase productivity through reduced mortality, more wool and lambs, and improved worm management. It may enable reduced intensity of mulesing or a phase-out of mulesing, resulting in sale of 'non-mulesed wool' for part or all of the clip.

Source: Breeding for Breech Strike Resistance Project, CSIRO Livestock Industries & AWI. Data from three consecutive flystrike seasons of a selection experiment at Armidale, non-mulesed sheep under flystrike challenge conditions (no chemical prevention, delayed crutching).



Source: *Visual Sheep Scores, 2007, MLA & AWI*



ABOVE: Flocks with mostly score 1 and 2 sheep will be highly resistant to flystrike

Breech strike is highly related to breech wrinkle score and dag score, whereas body strike is particularly related to fleece rot score. The Visual Sheep Scores, 2007 guide is available to help score sheep for these and other traits: visit www.sheepgenetics.org.au and choose Resources.

There are a number of key actions to develop a flystrike resistant flock: start by assessing ewes off-shears for body wrinkle. Estimate the average wrinkle score and fleece rot score and aim for the flock having scores of 1 or 2 for both traits, in the long term. Also, stop breeding replacements from high wrinkle score ewes—instead, cull or use them to breed prime lambs.

When choosing rams, use the ASBV for Early Breech Wrinkle (EBWR). If EBWR ASBVs aren't available from the stud and the sheep are mulesed, ask that these scores be recorded prior to mulesing in the future. In the meantime, use the neck wrinkle of the rams as a guide to body and breech wrinkle. If worms and dags are also a major risk factor, consider sourcing rams with low worm egg count (WEC) ASBVs.

Photos: Ian McConnel, DEEDI QLD.

ABOVE: Breed for plainness—two groups of progeny from the same line of ewes but with different sires; the two sires were similar for fleece weight and overall performance index but Sire A had a high EBWR ASBV of +0.6, whereas Sire B, with a low -0.6 EBWR ASBV, had progeny with far less wrinkle.

In just one cross, a sire with little or no wrinkle can make a very noticeable difference to the level of wrinkle in the progeny.

Using a balanced selection approach incorporating wrinkle, as well as the key profit traits of fleece weight and fibre diameter, will allow achievement of continued reductions in fibre diameter and improvement in fleece weight, whilst reducing wrinkle and flystrike susceptibility.

Photo: Sheep CRC

ABOVE: 'Lucilia cuprina' cause most primary strikes

With lambs, score breech wrinkle at marking and decide on-the-spot which lambs need mulesing and which don't; the latter include plainer (score 1 and 2) lambs, wether lambs and first-cross ewe lambs. Wrinkly lambs can be identified for culling at a more appropriate time. Consider different management plans for progeny based on their flystrike risk and keep wool from non-mulesed sheep separate and declare it via the National Wool Declaration (available from your broker or www.awex.com.au).

Other management considerations include worm and scour management, shearing and crutching times and the timing of chemical treatment to control flystrike. The FlyBoss website includes a simple-to-use flystrike risk tool for your area, where district-specific shearing, crutching and chemical application times can be customised to assess which combinations are best at lowering flystrike risk.

Finally, prepare and use a written annual management plan—a flystrike calendar—as written plans are more likely to be followed through.

Breeding for plainness (using the EBWR ASBV) is the key long-term solution to increased flystrike resistance and while there is a slight correlation between fleece weight and wrinkles, there is ample opportunity to find plainer sires with higher fleece weights.

More information
FlyBoss
www.flyboss.org.au

flyboss.org.au

Flystrike Management training
02 6773 2927
sheepcrc@sheepcrc.org.au